

Amendments to the Specification:

Applicants submit that the present application is provided in English subsequent to the translation of earlier-filed Chinese Patent Application No. 99111349.7 (the "Priority Document"), a certified copy of which was submitted to the USPTO on February 25, 2003, and that as a result of the translation, the term "threshold" as found in the Priority Document was incorrectly interpreted as "field value." Applicants therefore submit the following amended paragraphs to show the correct interpretation:

[0022] Estimating the user signal/noise ratio comprises: calculating user power; deciding the user power greater than a certain ~~field-value~~ threshold as effective power; calculating the ~~square-difference~~ variance for all signals with an effective power at their corresponding constellation map point; deciding those users with a low signal/noise ratio if their ~~square-difference~~ variance is greater than a preset value, and those users with a high signal/noise ratio if their ~~square-difference~~ variance is less than a preset value.

[0026] Step E is executed in a decision module, until the signal/noise ratio of all signals is greater than a set ~~field-value~~ threshold, then stops interference cancellation and outputs recovered signals.

[0050] If the power is greater than a certain ~~field-value~~ threshold, then it is an effective power. For all the signals with an effective power, calculate its ~~square-difference~~ variance on a corresponding point of a constellation map. If the ~~square-difference~~ variance is greater than a preset value, then the signal/noise ratio of this user is comparatively low and its $S_{ca+l,k}(d)$ value is unbelievable, so interference cancellation is needed. If, however, the ~~square-difference~~ variance is less than the preset value, then the signal/noise ratio of this user is comparatively high and its $S_{ca+l,k}(d)$ value is believable, so interference cancellation is unneeded. The purpose of using the signal/noise ratio estimating module is to simplify the calculation of interference cancellation, as it is unnecessary to cancel interference for a believable signal.

[0054] In FIG. 2, the function of deciding module 225 is to decide when interference cancellation will be stopped with two deciding conditions: (1) the signal/noise ratio of all signals is greater than the set ~~field-value~~ threshold, or (2) the numbers of loops of interference cancellations reaches a set number, which is less than or equal to the length of the search window and within this range the numbers of loops are decided by the processing capability of a digital signal processor, FPGA chip and the like. When either of the two conditions is satisfied,

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the processing procedure of the interference cancellation method of the smart antenna is ended and the recovered signal $S_{ca+I,k}(d)$ is outputted.